ISSN: 2321-8819 (Online) 2348-7186 (Print) Impact Factor: 1.498 Vol. 5, Issue 10, October 2017

# A Critical Review on Blepharitis and Its Ayurvedic Approach

**Prajakta A.Chachre [1], Santosh S.Mulik[2], D.B.Kadam[3] , Sarita S.Mulik[4]**

[1]PG scholar M.S. (Netraroga),Bharati Vidyapeeth College of Ayurved, Pune, Maharashtra (India)

[2]Guide, Asst. Professor M.S.Ph.D (ShalakyaTantra),Shalakya Tantra department , Bharati Vidyapeeth College of Ayurved, Pune, Maharashtra (India)

[3]H.O.D, M.S(ShalakyaTantra), Shalakya Tantra department , Bharati Vidyapeeth College of Ayurved, Pune, Maharashtra (India)

[4] Asst. Professor M.S(ShalakyaTantra),Shalakya Tantra department , Bharati Vidyapeeth College of Ayurved, Pune, Maharashtra (India)

**ABSTRACT:**Blepharitis is a common eye condition characterized by inflammation of the eyelid margins resulting in inflamed, irritated, itchy, reddened and oedematous eyelids. A number of diseases and conditions can lead to blepharitis. It can be caused by the oil glands at the base of the eyelashes becoming clogged due to bacterial infection, allergies or other conditions. The severity and course can vary. Blepharitis is a long-standing chronic granulomatous inflammation of lid margins.American Optometric Association has concluded that if blepharitis left untreated it can cause more serious conditions such as scarring or injury to the eye tissue or also lead to dry eye syndrome.Also,some cases of blepharitis may require more complex treatment plans and even with the successful treatment recurrence may occur[4].Blepharitis can be correlated with the sign and symptoms of Praklinna vartma which is breifly explained in vartmagat netravyadhis in Sushrut samhita.According to the Tridosh siddhant of Ayurveda blepharitis is a kaphaj vyadhi. Ayurvedic preparations for local application like Triphala rasakriya varti,Apamarga rasakriya varti,Vanshmool raskriya varti,Palash pushp raskriya varti are explained by Sushrutacharya in the treatment of praklinna vartma[5].

**KEYWORD-Blepharitis,Praklinna vartma,Palash pushp raskriya varti,Anjan.**

**Introduction:**

Blepharitis is very common subacute or chronic inflammation of eye lid margins[1].It occurs in two forms anterior and posterior.Anterior form includes seborrhoeic or squamous blepharitis and ulcerative blepharitis.Posterior form includes meibomian seborrhoea and meibomitis.Again Meibomitis present in chronic and acute forms.Occasionally parasitic blepharitis may found –blepharitis acarica caused by demodex folliculorum and phthiriasis palpebrarum caused by crab louse very rarely by head louse[2].

Seborrhoeic/squamous blepharitis:It's etiology is associated with seborrhoea of scalp(Dandruff).In this condition small white scales accumulate among the lashes which fall out readialy,but are replaced without distortion.In its etiology,some constitutional and metabolic factors play important role.In it,abnormal excessive neutral lipids secreted by glands of zeis which are split by corynebacterium acne into irritating free fatty acids.Its symptoms includes deposition of whitish material at the lid margin and on eye lashes,mild discomfort,irritation,watering and history of falling eyelashes.Signs includes accumulation of white dandruff like scales is seen on lid margin,among the lashes.If the scales are removed the underline surface is hyperaemic but not ulcerated,eyelashes fall out easily but replaced without distortion,lid margin becomes thickened, posterior border becomes sharp tends to be rounded leading to epiphora in long standing cases[1].

Staphylococcal /Ulcerative blepharitis /Bacterial blepharitis:It is chronic infection of anterior part of lid margin commonly caused by staphylococcus rarely by streptococci,propionibacterium acnes and moraxella.Its Symptoms are chronic irritation, itching,redness of edges of lid, gluing of cilia,mild lacrimation,mild photophobia.Yellow crusts or dry brittle scales gives the lashes together,on removing them small ulcers form which seen around the bases of lashes and they bleed easily,tylosis seen with dilated blood vessels(Rosetts),conjuctival hyperaemia and mild papillary conjunctivitis[1].

**Complication and sequelae-** Long standing bacterial blepharitis include lash abnormalities like madarosis,trichiasis,poliosis,lid abnormality like tylosis,epiphora due to eversion of lid,because of prolong watering eczema of skin and ectropion develope,recurrent external hardeola,marginal keratitis and rarely phlyctenulosis,dry eye syndrome,because of intimate relationship between lid margins and ocular surface secondary inflammatory and mechanical changes in conjunctiva and cornea are common[1].

**Posterior blepharitis:** Meibomitis- Inflammation of meibomian glands occur in chronic and acute forms.Chronic meibomitis more commonly seen in middle aged person,especially those having acne rosacea or seborrhoeic dermatitis.In pathogenesis of chronic meibomitis bacterial lipase play main part.It is commonly occurring meibomian gland dysfunction.Symptoms include white frothy secretions are seen on eyelid margin and canthi,prominent opening of meibomian glands

with thick toothpaste like secretions which can be expressed out by pressure on the lids,openings of the meibomian gland show capping with oil globules,pouting,recession or pluggins,on eversion of lids vertical yellowish streaks shining through conjunctiva can be seen,around the orifices of meibomian gland of posterior lid margin hyperaemia, telangiectasia can be seen,foamy and oily tear film with accumulation of froth on the inner canthus and lid margin,secondary changes like papillary conjunctivitis and inferior corneal punctate epithelial erosion may be seen.Acute meibomitis caused by staphylococcal infection charectarized by painful swelling around the involved gland,on applying pressure on the lid pus bead followed by serosanguineous discharge is expressed[3].

**Meibomian seborrhoea-** In this on the openings of meibomian glands oil droplets seen which can be expressed out like foam[2].

Parasitic blepharitis commonly found in persons who leaves in poor hygienic conditions.There are two types of parasitic blepharitis phthiriasis palpebrum commonly seen in adults who is acquired sexually transmited infections.It is caused by crab louse,phthirus pubis.Blepharitis acarica caused by demodex folliculorum.Symptoms includes chronic irritation,itching,burning sensation and mild lacrimation.Signs includes red,inflamed lid margins,lise anchoring the lashes with there claws,nits seen as opalescent pearls adherent to the base of cilia.In long standing cases conjuctival congestion and follicles may be seen[1].

**Treatment:** General constitutional measures-Associated seborrhoea of the scalp should be adequately treated.Assessment of the patient must be done with his hereditary and previous personal history.In many cases,particularly in children,the general health requires attention,frequently by a complete change from surroundings which may be unhygienic.Other than this diet is very important ;irregular feeding,particularly with carbohydrate diet or over fidding should be replaced by sensibly balanced intake together with regulated intestinal hygiene.To these may be added fruit juices ,vitamins and antioxidant rich food.

**Lid hygiene-** It is first and foremost in the maintainance of cleanliness with constant removal of scales,exudates and crusts.Without this being done scrupulously,determinedly and persistently,every case of blepharitis tend to become chronic longer after its original cause has disappeared.Warm compression should be applied for several minutes to soften the crust at the bases of the lashes.Scales are removed with a pleget of cotton-wool soaked in oil(olive oil,paraffin etc.)The greasy type blepharitis is cleaned with toothpick swab soaked in benzene,tincture of iodine,weak silver nitrate,baby shampoo or sodium bicarbonate.In ulcerative conditions cleansing of lid margin is difficult and must be preceded by a thorough removal of the discharge and softening of the crust by hot fomentation,washing with warm water and soap,the crust should be removed by the pleget of cotton soaked in oil or hydrogen peroxide,stroke in the direction of lashes until they and the ciliary border are completely exposed.In case of posterior blepharitis on massaging of lid gives to express the accumulated meibum and then should be removed with cotton bud soaked in sodium bicarbonate.After that local antibiotics and steroid are to be applied.

Topical antibiotics such as chloramphenicol should be rubbed on to the anterior margin of lid with cotton bud or clean finger.Antibiotic orally in severe and recurrent cases i.e.azithromycin 500mg for three days.Weak topical steroids such as flurometholone 0.1% administered q.i.d. for one week.Systemic tetracyclines such as oxytetracycline 250mg b.i.d.for 6 to 12 weeks,doxycycline 100mg b.i.d. for one week and then daily for 6 to 12 weeks,Erythromycin 250mg b.i.d. daily for 6 to 12 weeks[3].

Symptoms of praklinna vartma are vartma shotha(eyelid oedema),vartma kandu(itching),toda(foreign body sensation),araktata(redness) and klinnatva.In the treatment of blepharitis Ayurved has much to offer with the help of medications like local application of Apamarga rasakriya varti,Triphala rasakriya varti,Amalaki rasakriya varti,Vanshmool raskriya varti,Palash pushp raskriya varti etc. Looking into Ayurvedic treatment modalities,as praklinna vartma is a kaphaj disesase,the drug should have kaphaghna property.Hence,according to Sushrut Acharya the external application of anjana to eyelids of Palash pushp rasakriyavarti,Amalaki rasakriyavarti,Triphala rasakriyavarti is useful to cure the symptoms of praklinna vartma[5].

Palash pushp is katu- tikta -kashay rasatmak,snigdh- laghu gunatmak,madhur vipaki and sheet veeryatmak and hence is kaphashamak and chakshushya in its property[6].For the preparation of varti, palash pushp bharad and water is taken in ratio 1:16.It is then boiled and turned into decoction and this decoction is reheated in copper vessel(for lekhan property of tamra) till complete evaporation of water to form avaleha.This avaleha is then rolled between thumb and index finger to form varti,after dried it is applied externally to eyelids[5]. Palash pushp is chakshushya (beneficial to eyes) and has lekhan property i.e does lekhan of kapha in kaphaj disorders and hence there is minimal chance of recurrence of the disease.

**CONCLUSION**- Blepharitis is inflammation of the eyelids which has uncertain etiology and mechanism and high frequency of recurrence which makes its management more difficult. The long term effect due to chronic inflammation leads to permanent changes such as trichiasis(misdirected eyeleashes),poliosis(white lashes),madarosis(loss of eyelashes) and tylosis(irregular thickening of eyelid margin) Treatment of blepharitis includes lid hygiene,antibiotics and steroids.Recurrence of the disease is still there as well as the development of resistence to antibiotics in prolonged treatment.Also prolonged use of steroid is discontinue to avoid steroid induced complications. Blepharitis can be correlated to symptoms of Praklinna Vartma of vartmagat vyadhis.On critical analysis of the symptoms of blepharitis on Trodosh siddhant of Ayurved,it seems to be a kaphaj vyadhi.Looking into the ayurvedic treatment modalities,the drug should have kaphaghna property.Palash pushp having chakshushya property(beneficial to eyes) also does lekhan of kapha dosha and hence causes kapha shaman.So ,external application of Palash pushp raskriya varti anjana to the eyelids play an important role in the treatment of blepharitis

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